







# RICHMOND HIGHWAY (U.S. ROUTE 1) SPEED LIMIT STUDY

Virtual Public Information Meeting
November 30, 2021 7:00 PM – 8:30 PM

# Virtual Public Information Meeting in Response to COVID-19

The virtual public information meeting and VDOT website provides the same information as an inperson meeting:

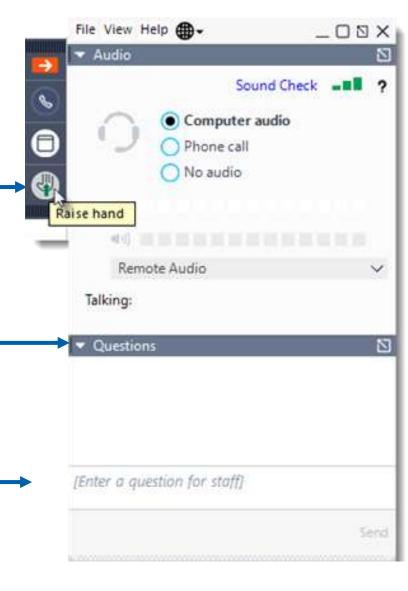
- ✓ Study information
- ✓ Estimated schedule
- ✓ Processes for submitting comments
- √ Key contacts



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## **GoToWebinar Tips**

- If you want to ask an oral question
  - Raise your hand and unmute yourself.
  - The moderator will state your name when it is your turn to ask a question
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- All participants are muted.
- If you get disconnected, please attempt to rejoin the meeting.





Virginia Department of Transportation

## **Presentation Agenda**

- Introduction
  - Gil Chlewicki, VDOT Northern Virginia District Traffic Engineer
- Study Overview
  - Tien-Jung "Tina" Ho, Project Manager, VDOT Traffic Engineering
- Speed Limit Study Process
  - Warren Hughes, ATCS, PLC, Speed Limit Study Manager
- Study Schedule
  - Michelle Cavucci, VHB, Consultant Project Manager
- Questions and Answers
  - Andrew Beacher, VDOT Preliminary Engineering, Q&A Moderator



## **Study Location**





## **Study Need**

- Safe mobility for drivers, pedestrians, cyclists, and transit users is a priority
- Several safety initiatives underway along the corridor, by VDOT and Fairfax County
  - New sidewalk and trail connections
  - Transit
  - Pedestrian and bicycle safety
  - Intersection improvements
- Appropriate travel speeds and posted speed limit(s) are essential to addressing evolving safety needs and changes on Richmond Highway



## This Speed Limit Study Will...

- Evaluate the existing 45 mph speed limit
- Conduct technical analyses to determine appropriate speed limit along 7.8-mile corridor
  - Based on existing conditions
  - Focused on speed limit study factors
  - Considering drivers, pedestrians, bicyclists and transit users
- Recommend speed limit(s) on Richmond Highway



## **Richmond Highway Study Area**





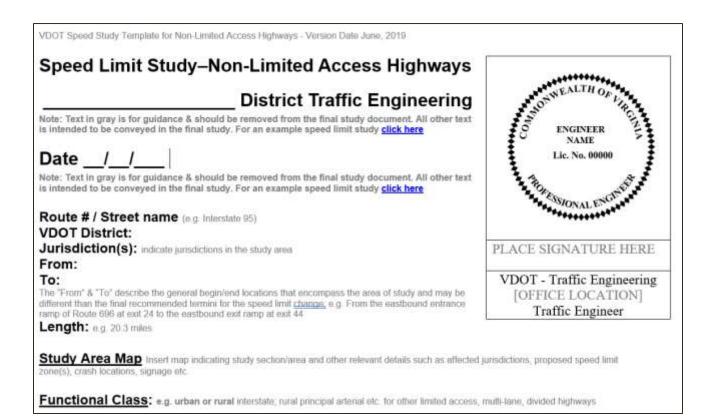
## **Richmond Highway Changes in Cross Section**





## **Setting Speed Limits**

- For speed limit changes, an engineering study is required by Virginia law
- VDOT study requirements
  - Signed and sealed by a Professional Engineer
  - Submitted in a specific format





## **Setting Speed Limits\***

1

2

3

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5

VDOT District Traffic Engineer's office conducts study District Traffic Engineer reviews study and makes determination District Traffic
Engineer
establishes legal
speed limit
through resolution

District Traffic
Engineer orders
sign posting and
notifies State
Traffic Engineer

VDOT State Traffic Engineer formally records speed limit in state records

Code of Virginia Section 46.2-878 requires an engineering study prior to change in speed limit District Traffic Engineer reviews study; VDOT requires studies be signed and sealed Code of Virginia grants approval to the VDOT Commissioner who has delegated that approval to the District Traffic Engineer in the case of non-interstate roadways

Code of Virginia says speed limit changes are effective only after a study and when signs are posted Speed limit changes are kept on file in the VDOT Central Office as required by the Code of Virginia

\*Process for Non-Interstate Roadways

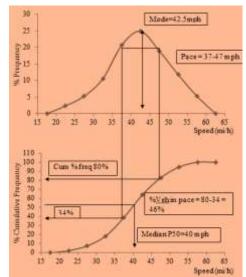


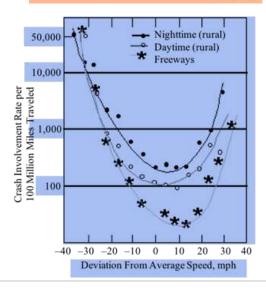
### Data on vehicle speeds

- Distribution of speeds collected at multiple locations in study section
  - 85<sup>th</sup> percentile speed
  - 50<sup>th</sup> percentile or median speed
  - 10 mph Pace range in speeds that includes a high percentage of observations

## Reported crash experience

- Minimum of 3 years of crash data
  - Number of crashes, injuries from crashes, and fatalities from crashes
  - Rates of fatalities, personal injuries and crashes
  - Comparison to statewide average rates for similar roads







#### Functional classification

## Physical roadway features

- Number of lanes, medians, lane widths, shoulder widths, and clear space on the roadside
- Grades and curves
- Roadside (guardrails, objects, side slopes)

#### Traffic control devices

- Frequency of traffic signals
- Existing speed limit
- Adequacy of regulatory, warning and guide signs
- Adequacy of centerlines, edge lines, other pavement markings, raised pavement markers







- Traffic and operations
  - Traffic volumes
  - Percentage of trucks
  - Entering and exiting traffic at intersecting roads
- Pedestrian and bicycle facilities and activity
  - Presence of sidewalks and paths
  - Pedestrian crosswalks
  - Pedestrian and bicycle flows







- Roadway type and roadway context
- Roadside environment, including adjacent development

State and local police comments and concurrence





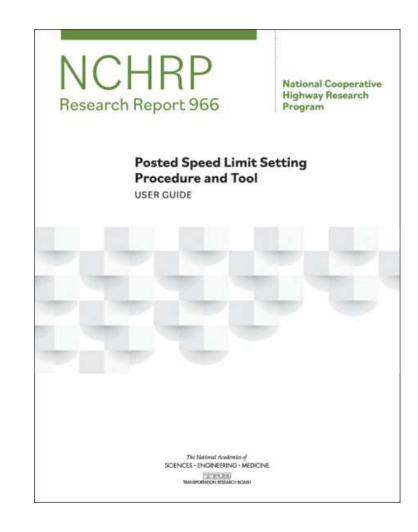


<b>D. Law Enforcement Consensus:</b> Where a speed limit change is proposed the study and speed limit recommendation, along with a request for comments and concurrence, should be conveyed to the Virginia State Police (VSP) at the appropriate district (click <a href="here">here</a> for VSP districts) and to local law enforcement for the affected jurisdiction(s) and their response detailed as laid out below. A response from VSP is required in the final study.		
The recommended speed limit change has been discussed with		
Indicate officers name of the Virginia State Police who (indicate either concurs or opposes as appropriate) the recommended speed limit within their jurisdiction. The available and appropriate accident and law-enforcement data has been requested.		
The Virginia State Police Officer: Concurs with Opposes the recommended speed limit  Law enforcement comments: document law enforcement comments here		



## **Integrating Best Practices**

- Information from latest national research with best practices
  - National Cooperative Highway Research Program (NCHRP) Report 966 – Posted Speed Limit Setting Procedure and Tool: User Guide (2021)
  - National Transportation Safety Board (NTSB)
     publication Reducing Speeding-Related
     Crashes Involving Passenger Vehicles (2017)
- Roadway context and roadway type
- Guidelines based on speed distribution, roadway conditions, driver speed choice, and safety





# **Anticipated Study Schedule**

Milestones	Dates
Public Information Meeting #1	November 30, 2021
Draft Report & Recommendations	Early Spring 2022
Public Information Meeting #2	Spring 2022
Final Report	Summer 2022



### **How to Submit Your Comments**

Give feedback on the virtual public information meeting in the following ways by December 10, 2021:







#### **Email Us**

MeetingComments@vdot.Virginia.gov
Please reference "Richmond Highway
(Route 1) Speed Limit Study in
Fairfax County"
in the subject line

#### Mail Us

Ms. Tien-Jung "Tina" Ho, P.E.
VDOT's Northern Virginia District
4975 Alliance Drive
Fairfax, Virginia 22030

#### Comment

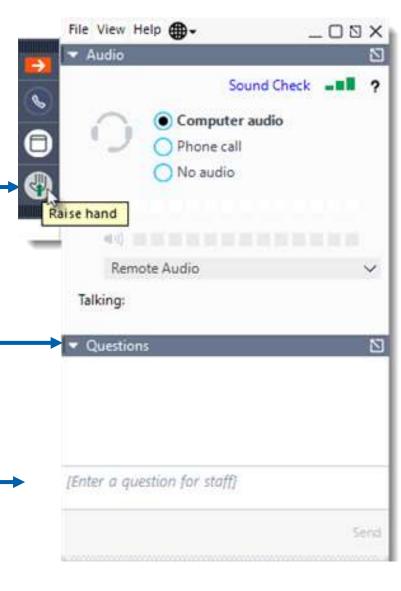
In the Questions window during the virtual meeting or online at virginiadot.org/Route1SpeedLimitStudy



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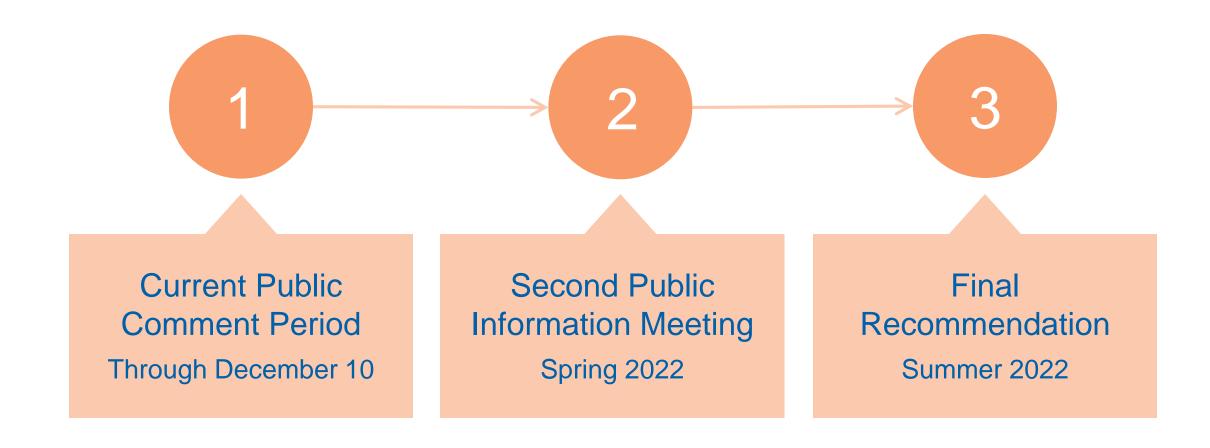
## Important Initiatives on Richmond Highway

- More than \$500 million has been invested in pedestrian and bicycle infrastructure improvements in Fairfax County;
  - More than \$55 million in the Richmond Highway Corridor.
- Signalized pedestrian crossing improvements
  - Early pedestrian start into crosswalk and more WALK opportunities
  - Higher visibility crosswalks
  - Audible pedestrian pushbuttons for visually impaired
- Additional intersection improvements
  - Mt. Vernon Highway
  - Fort Hunt Rd
- Public Transportation Initiative





### **Thank You!**





## **VDOT Speed Limit Study Overview**

- Set speed limits that promote safe and efficient flow of traffic considering
  - Speed
  - Roadway
  - Crash history
  - Surrounding context
  - Enforcement
- Obtain speed data sample considering
  - Traffic conditions
  - Weather
  - Alignment, grade, pavement conditions
  - Multiple sites to account for variability in roadway and driver characteristics



## **Questions Related to Other Richmond Highway Projects**

 For questions related to the VDOT Richmond Highway Widening Project

Dan Reinhard

<u>Dan.Reinhard@vdot.virginia.gov</u>

703-259-2599

 For questions related to the Fairfax County Bus Rapid Transit Project

**DOTBRT**@fairfaxcounty.gov

703-877-5600

Fairfax County Department of Transportation, Richmond Highway BRT Project Manager, 4050 Legato Rd, Fairfax, VA 22033

